

**Tabanus aranti** sp. nov. (Diptera: Tabanidae)  
from Alabama

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The attacks of Tabanidae (horseflies and deerflies) upon cattle present a serious problem in certain sections of Alabama. In 1960, the Auburn Agricultural Experiment Station began a project concerning the ecology and control of these insects. During the spring of 1960, tabanid larvae were collected and 14 species were reared to adulthood. One of these species appears to be undescribed. It is here proposed that this species be called *Tabanus aranti*. The writer wishes to thank C. B. Philip of Hamilton, Montana, for consultation relative to the identity of this species.

**Tabanus aranti** sp. nov. (Fig. 1)

Large; black, with bluish pruinosity; wing darkened, darker along veins; basal callus higher than wide, median callus narrowly joined to basal callus; subcallus pollinose.

Holotype Female.—Length 22 mm. Nine paratype females vary in length from 15 to 22 mm. Eye bare. Frons 4–4½ times as high as wide, slightly widened above, grayish, darkened at vertex and laterad from median callus. Basal callus higher than wide, black, shiny, and not touching the eyes. Median callus a narrow concolorous line, not widened at juncture with basal callus. Subcallus wrinkled, flatter in profile than *T. wiedemanni*, dark brown pollinose. Clypeus and genae dark brown pollinose with blackish brown hair. Antennae black, first two segments with black hair, third segment black (sometimes reddish tinged basally) with a prominent dorsal angle and deep dorsal excision; annulate portion shorter than basal width. Second palpal segment black with black hair, sharper than palpi of *T. wiedemanni*, moderate in width.

Dorsum and venter of thorax blackish sometimes tinged with red, thin bluish pruinosity anteriorly; hair black. Legs black with concolorous hair. Wings darkened, darker along veins; venation normal. Halteres black, light distally.

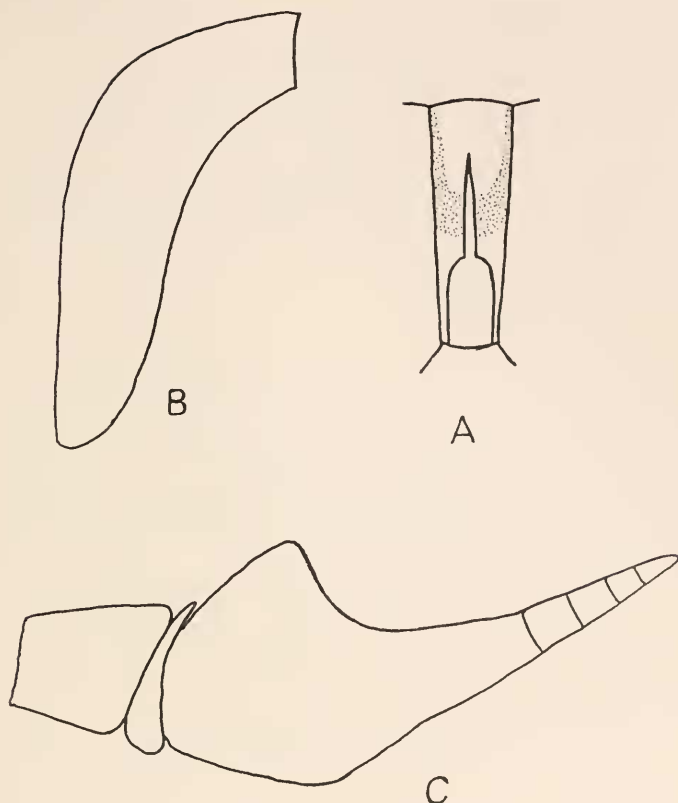
Dorsum and venter of abdomen black with bluish pruinosity.

Allotype Male.—Length 17 mm. Paratype males vary from 16 to 20 mm. Like the female except the bluish pruinosity is almost absent and the usual sexual differences. Head as wide or wider than thorax. Enlarged facets of eyes less extensive than in *T. wiedemanni*. Tubercle at vertex distinct, ovoid and slightly raised above the level of the eyes, reddish brown in color. Frontal triangle brownish pollinose, darker brown at the apex. Antennae brownish with black hairs, all portions more slender than in the female; annulate portion of third segment longer than basal width. Terminal palpal segment over 2 times as long as wide, blunt apically. Internal claw of fore tarsus shorter than external. Bluish pruinosity of abdomen much more sparse than in the female.

*Type Material:* Holotype female collected by the author at Auburn, Alabama, June 23, 1958. The allotype, nine paratype females, and eight paratype males were reared from larvae collected from the edge of a small pond on the North Auburn Dairy Research Unit at Auburn, Alabama. All reared material emerged between May 20 and 30, 1960, and are pinned with the pupal case. The holotype was collected on the wing and is believed by the author to best represent the natural characteristics of the species.

The holotype and allotype are deposited in the University of Michigan Museum of Zoology. Male and female paratypes are deposited in the collections of the U. S. National Museum, C. B. Philip, and L. L. Pechuman. The remainder of the material is in the collections of the author. Named for F. S. Arant, a colleague and 1961 President of the Entomological Society of America.

The species appears close to *T. wiedemanni* O. S., but is distinctly larger; median callus, narrow, not widened at juncture with basal callus and with a bluish pruinosity on the body in the female. The male has less extensive areas of large facets of the eye and averages larger in size. The species is also close to *T. nigrescens atripennis* and may be separated from it by the bluish pruinosity of the abdomen, a slightly narrower median callus and less red on the base of the third antennal segment in the female.



*Tabanus aranti* n. sp., holotype  
A. Front, B. Palpus, C. Antenna.

*Natural History:* The large larvae of this species were collected in the organic ooze common along the shallow edges of southern farm ponds. Cattails and sedges grew in clumps in the vicinity. The edge of the pond was shaded by loblolly pine and sweet gum trees in the late morning and afternoon. No larvae were found in similar unshaded areas around the edges of the same pond. The larvae moved into drier, litter-covered soil and formed a cell somewhat larger than the larva and pupated. The period of pupation was 9 to 12 days.